

DEQ Water Protection Bureau Vegetation Stabilization Criteria For Storm Water

This document serves as the basis for determining final stabilization for terminating coverage under the *General Discharge Permit for Storm Water Associated with Mining and with Oil and Gas Activities*.

Vegetative Cover Criteria

The vegetation requirement for stabilization of the site is an effective and permanent vegetative cover that prevents soil movement during precipitation events. The minimum vegetative cover requirement is the amount of cover sufficient to prevent accelerated erosion.

- Accelerated erosion is defined as rills of 2 inches deep or more, earth slides, mud flows, sediment deposition, or evidence of concentrated flows of water over bare soils.
- Additionally, stabilization criteria have been achieved once a ground cover of 70 percent has been achieved (as compared to vegetation cover on undisturbed areas).

Final vegetation stabilization must be accomplished using seed mixtures or forbs, grasses, and shrubs that are adapted to the conditions at the site.

Documentation

Supporting documentation that the site has been adequately stabilized must be submitted to the Department and must include:

1. *Pictures of present vegetative growth*
Pictures of the location where each transect were conducted are required. Low-level photography must occur at approximately 90 degrees to the surface in order to properly assess ground cover.
2. *Multiple transects*
A minimum of at least one 100-foot transect of vegetation must be conducted for every 5 acres that is cleared, graded, or excavated. Additional transects may be required by the Department on a site-by-site basis. The Department shall determine the number of transects required for large construction projects (>20 acres). Transects must be located in an area(s) that is representative of the vegetation for the whole construction project. Transects must be conducted by laying out a 100-foot tape. At every footmark, note whether vegetation, litter/mulch or bare soil is encountered. Results are to be expressed as a percent of ground cover. For example:
 - One transect of 100 points in which 28 points exhibit cover is $(28/100)*100 = 28\%$ ground cover.
 - Two transects of 100 points each in which 28 points exhibit cover in one transect and 41 points exhibit cover in the other transect; cover is $(28 + 41) / 200 * 100 = 34.5\%$ ground cover.
3. *Background conditions*
In areas where final stabilization may be less than satisfactory due to poor soil or other natural site conditions, the permittee shall document the percent ground cover of the indigenous vegetation with pictures and a transect(s).

Termination

Termination of coverage under the general permit will be at the discretion of DEQ professional staff based on an analysis of erosion potential as described above. A contractor may terminate coverage once released from a construction contract by the owner. The owner is responsible for permit coverage and final stabilization once the contractor has been relieved of the contract requirements for a construction project.